

ABSTRACT

A sintered object of silicon monoxide for use as a material for forming silicon oxide thin films is provided of which the evaporation residue as determined by subjecting a sample thereof to thermogravimetry at a heating temperature of 1,300°C and in a vacuum atmosphere, namely at a pressure of not higher than 10 Pa, is not more than 4% by mass relative to the sample before measurement. This sintered object can be produced by sintering SiO particles having a particle diameter of not smaller than 250 μm , either after press forming thereof or during press forming thereof, in a non-oxygen atmosphere. This sintered object is high in evaporation rate and, when it is used as a material for film formation, an improvement in productivity in producing silicon oxide thin films can be expected. Thus, it can be widely applied in forming silicon oxide thin films useful as electric insulating films, mechanical protection films, optical films, barrier films of food packaging materials, etc.